

XXV.—*On some Species of Cetoniidæ from the Loo Choo Islands.* By OLIVER E. JANSON, F.E.S.

IN the Ann. & Mag. Nat. Hist. for March 1887 Mr. George Lewis has given a revision and list of the Cetoniidæ of Japan ; but at that time very little was known of the insects of the Loo Choo Islands, and no species is recorded by Mr. Lewis from this locality. Recently my friend Mr. H. Pryer visited these islands and made a small collection, and judging by the Coleoptera received from him it would appear that the insect-fauna is very closely related to that of Japan. Three species of Cetoniidæ have been sent to me by Mr. Pryer ; of these the two species of *Cetonia* are apparently undescribed, they bear a marked resemblance one to the other in colour and general aspect, but are not closely allied.

1. *Glycyphana forticula*, Jans.

Glycyphana forticula, Janson, Cist. Ent. ii. p. 603 (1881).

I described this species from a single specimen received from Japan without indication of the precise locality ; but it probably came from the island of Kiusiu. Mr. Pryer has sent a second specimen from the Loo Choo Islands which differs from the type in its rather smaller size and in the absence of the small white discal spots on the thorax and elytra and the four spots on the pygidium.

2. *Cetonia Lewisi*, n. sp.

Viridis, nitida, tibiis tarsisque æneis vel cupreis ; elytris postice sparsim albo-maculatis ; clypeo elongato, lateribus elevatis, apice anguste reflexo, sinuato ; thorace margine postico ante scutellum fortiter emarginato ; scutello lato, apice rotundato ; processu mesosterni producto valde dilatato.

Long. 26–30 mm.

Var. elytris immaculatis.

Shining green, slightly golden, tibiæ and tarsi brassy or coppery, elytra in some specimens with sparse white spots behind. Head rather coarsely punctured, slightly longitudinally convex, the clypeus elevated at the sides, the apex narrowly reflexed and slightly emarginate. Thorax very finely and sparsely punctured on the disk, the sides more coarsely punctured, slightly impressed on each side behind,

the base produced and deeply emarginate before the scutellum, the lateral angles rounded. Scutellum finely punctured at the base, broad and rounded at the apex. Elytra very sparsely punctured on the disk before the middle, behind the middle and the sides with irregular rows of semicircular punctures, which become closer and more confused towards the apex. Pygidium coarsely and sparsely punctured, strongly convex towards the apex, a small deep fovea near the lateral angles. Beneath coarsely strigose at the sides, the abdomen coarsely punctured at the sides and apex; mesosternal process large, strongly dilated, and rounded in front. Legs coarsely punctured and strigose; femora and tibiæ fringed with pale golden-brown hairs, outer apical spur of the posterior tibiæ distinctly bisinuate. The female is larger than the male, more strongly punctured, with the pygidium less convex and broadly impressed on each side; the legs are stouter and the spurs of the posterior tibiæ are broader and scarcely sinuate.

Loo Choo Islands (*H. Pryer*).

This fine species differs from *C. Confuciusana*, Thoms., in having a more elongate clypeus, with the lateral margins strongly elevated and the apex more narrowly reflexed, the thorax more deeply emarginate at the base, the scutellum broader at the apex, the pygidium with a fovea at the sides, the punctuation of the upperside more sparse, the mesosternal process much more produced and dilated, and the spurs of the posterior tibiæ distinctly bisinuate.

3. *Cetonia Pryeri*, n. sp.

Viridi-ænea, nitida, tibiis tarsisque æneis vel eupreis; clypeo lateribus valde elevatis, apice reflexo, emarginato; thorace angusto, margine postico ante scutellum leviter emarginato; scutello apice obtuso; processu mesosterni dilatato, antice rotundato.

Long. 23–26 mm.

Shining brassy green, tibiæ and tarsi brassy or coppery; some specimens with minute white spots near the outer margin and suture of the elytra, on the pygidium, and at the sides of the abdomen. Head coarsely punctured; clypeus convex in the centre, the sides thickened and strongly raised, the apex broadly reflexed and emarginate. Thorax much narrower than the elytra at the base, a little produced behind, and slightly emarginate before the scutellum, coarsely punctured at the sides, more finely punctured on the disk, the median line impunctate except at the apex, a slight impression on each side at the base. Scutellum narrowed and obtuse at the apex, a few punctures at the base. Elytra coarsely

punctured on the disk before the middle, behind the middle and at the sides with irregular semicircular punctures, which become confluent towards the apex; a rather strong, smooth, discal costa from the middle to the apical callosity; slightly impressed at the apex of the scutellum and within the humeral prominence. Pygidium short and broad, slightly convex, with coarse confluent punctures and sparse pubescence; a large fovea on each side near the apex. Beneath very coarsely punctured at the sides; mesosternal process dilated and rounded in front. Legs punctured and sparsely pubescent.

Loo Choo Islands (*H. Pryer*).

Compared with *C. Lewisi* this species has the thorax narrower at the base and less deeply emarginate before the scutellum, the scutellum much more narrowed at the apex, the pygidium less convex, and the mesosternal process much smaller; it appears to be allied to the European *C. angustata*, Germ. All the specimens taken by Mr. Pryer are males, and there are also examples from the same locality in the collections of Mr. G. Lewis and the British Museum.

XXVI.—*An Account of three Series of Lepidoptera collected in North-west India by Major Yerbury.* By ARTHUR G. BUTLER, F.L.S., F.Z.S., &c.

[Continued from p. 151.]

Papilionidæ.

PIERINÆ.

64. *Colias Fieldii*.

Colias Fieldii, Ménétriés, Cat. Mus. Petrop. Lep. i. p. 79, pl. i. fig. 5 (1855).

♂. Thundiani, 15th August, 1886.

This is considerably larger and deeper-coloured than *C. edusina*; the latter is, however, perhaps nothing more than the prevalent western type of the same species.

65. *Colias edusina*.

Colias edusina, Felder, Wien. ent. Mon. iv. p. 100. n. 55 (1860).

♂. Murree, 2nd August, 1885; ♂ ♀. Thundiani, 13th, 15th, 17th, and 25th August, 1886.